

Introduction

India is the second most populated country in the world, counting for over 1,3 billion people, a number that is rapidly increasing. In line with the rest of the world, India is, next to its increase in population, seeing a rapid urbanization, with Mumbai in the centre of it all. Considering the increase of population and the urbanization of India, it is only a logical cause that its capital is now growing at an unprecedented pace. In only fifty years' time, the population of Mumbai has tripled, with no apparent end to be seen. Almost needless to say, the city is struggling with these numbers. What might be even more striking is the fact that in the same time span, the percentage of people living in slums has risen from roughly ten percent to as much as fifty percent of total population. And although slum dwellers form half of the population, their homes only take up 6% of the total land area. The conditions in which many of these dwellers live, are alarmingly unhygienic and according to the Census of India unfit for human habitation. The late Kofi Annan, former Secretary General of the UN, wrote the following in the UN-Habitat Report "Challenge of the Slums" (UN-Habitat, 2003):

"Without concerted action on the part of municipal authorities, national governments, civil society actors and the international community, the number of slum dwellers is likely to increase in most developing countries. And if no serious action is taken, the number of slum dwellers worldwide is projected to rise over the next 30 years to about 2 billion."

If Kofi Anan's words are to be taken even remotely seriously, it is clear that action is needed. Current positions are almost impossible to maintain: change is paramount.

In Mumbai, change has been tried to be established by the state government of Maharashtra, under which Mumbai falls, for decades now. Implementing policy to reduce slum dwellings has been, and still is, one of the key challenges. However, policy making is mainly looked upon as a practice in numbers. The main objective is to house as many dwellers as possible, with the lowest possible investment. It will be no surprise to any, that this strategy pays hardly any attention to the social and economic needs of the dwellers. It is upon this background that my project was conceived and shaped into its final form. In this reflection I will look back on the process and discuss the research methodology and its relationship to the design. Also, I will look at the (ethical) issues and dilemmas I encountered and the potential applications of the result.

Research methodology

The Faculty of Architecture in Delft has a long-standing history of the use of the so-called 'plananalyse' as a research method. By means of reductions, additions and disassembly's, drawings aim to give an insight in the different architectural and urban conditions of the build environment. The research conducted for this project can be divided in two parts, both chronologically as well as methodologically. The first part is very much based on the practice of the plananalyse and is done in Delft, far away from the location (Nala Sopara, Mumbai) of its subject. The second part is initiated with a two-week site visit, followed by a period of synthesis of the knowledge gained in Mumbai.

The first part of the research is very much predetermined by the instructions of the tutors and with regard to the method there is not much space for self-learning or the introduction of original thought. Considering the time at hand and the need to get oneself accustomed with a completely different background, both socially, economically as well as architecturally, this approach to the first part of the research is understandable. There is little time and a lot to learn, which leaves hardly any space for a quest into an appropriate research method, nor leaves it much space for experimentation. In this light, it was inevitable that, after half a year of research, I still felt like I merely scratched the surface of the topic and

a few more months of research would not have been too much of a luxury. In my opinion, the final result of the project would have been better and more layered if there would have been more time for research. In a way, this project would be more suitable as a three-semester course rather than the two semesters it takes up now.

The second part of the research was absolutely invaluable. Being in Mumbai, experiencing the city and its exhausting rhythm, hearing the sounds, feeling the heat, smelling the scents, none of it would have been possible anywhere else. The first part of the research shed lights on very particular parts of the city and its life, leaving a fragmented image of the whole. Being there, those fragments found its way to a more complete image, revealing glimpses of a dauntingly complex system that made up the city and its inhabitants. In a way, it only made me more aware of the little knowledge I have of this world.

During the field trip in Mumbai, we were subjected to a crash course into modern Indian architecture. Correa, Doshi, Rewal; there were all there. But since architecture is always highly contextual, I found it just as interesting to watch the dwellings we visited as subjects of everyday practice or to hear Pk Das' son talk about the politics behind Sangharsh Nagar or simply speak with the people we met about their everyday life, assisted by the invaluable help of the KRVI students accompanying us. Sometimes even more interesting than the architectural object itself, is the political, societal and economical context that shaped its physical presence. A building should never be seen as a freestanding object, but always as part of a larger system: the city as an ecosystem.

The relationship between research and design

During the field trip in Mumbai I spend a day in the village of Nala Sopara, studying the social patterns, border patterns, the patterns of income generation and the patterns of building technology. This day lay the basis for my design. Studying the patterns in the village as well as visiting the many reference projects elsewhere in Mumbai, including Charles Correa's Belapur, gave me a valuable basis to build upon the framework of my design project. The visit to the village made me realise the importance of what Correa calls 'open-to-sky-space' but even more the role of 'in-between' spaces in the everyday practice in Mumbai. It are these spaces that blur the boundary between the public and the private and result in a complex hierarchy of spaces. They are also the places where the (community) life takes place, they function as an intermediate between the street and the house. They are usually more private than the street but more public than the house. It is where visitors will take off their shoes before they advance into the house, where neighbours will celebrate festivities with each other and where children meet and play. I have tried to bring back those kinds of spaces in my design.

The research I have done in Mumbai has been instrumental for my project and has, for a large part, determined the shape of the design. The research I did before going to Mumbai has perhaps not had such a direct impact on the design, at least not in a clearly visible way. However, I do think that it was important for creating a basic understanding of Indian culture and policy's regarding to housing. It formed part of the background upon which my project was conceived. I also think my time in Mumbai would not have been as valuable if I hadn't conducted the research of the first two months.

Ethical issues and dilemmas and the potential applications of the results

An important and always present conflict during the project, came from the fact that I have conducted this research on an environment far away from what I call home and with what I am most familiar. It is inevitable that this research on housing conditions in Mumbai was done from a western perspective, as that is the only perspective I have. Nearly 30 years of bias cannot be easily overcome. Andrew Harris addresses this conflict in his article *The Metonymic Urbanism of Twenty-first-century Mumbai*, when he talks about the increasing interest for the urbanism of Mumbai as "a welcome rejoinder to a continued predominance of North American and European cities within international urban research and debate" (Harris,

2012). He does however stress the importance of being aware of the “theory cultures and geographical imaginations” that have been mapped onto Mumbai. He is pleading for the development of a new theoretical language and the opening of new channels of urban research and policy formation, without the implementation of Mumbai as a paradigmatic status. This biased position from which I inevitably conduct my research is important to be aware of. It is in this light that indeed it would be highly recommended to develop a vernacular language with regard to cities in the global south.

Another point of potential conflict which one needs to be aware of, is the harsh reality of housing policy's in Mumbai, or rather, the lack thereof. It became painfully obvious, when visiting the Sangarsh Nagar project by Pk Das, that affordable housing in Mumbai is more often than not left in the greedy hands of developers. From the rooftop of Pk Das' project, we could behold the new housing blocks nearby getting shape. Within a distance of less than 100 meters, all the noble intentions and hard effort of Pk Das had disappeared. This was the reality of Mumbai, where people matter less than numbers and profits, and the government is unable or unwilling to implement real change. Listening to Pk Das' story, back in the Netherlands, and hearing about the exhausting fight he and many others had put up in order to get Sangarsh Nagar build, only to find the project being surrounded by the same type of buildings they so painstakingly had tried to prevent, it made me wonder about the role of architects in society. To what extent do we shape the build environment, as we like to believe? Do we at all? Reinier de Graaf describes in his book 'Four Walls and a Roof' (Graaf, 2017) the architect's “ultimate secret” as follows: “packaging dependency as authority - the art of deferring the question of who ultimately needs whom, preferably forever.” I am not sure if I can find myself completely in this statement, I find it rather cynical (but then again, perhaps that is my inexperienced naivety), however, while working on this project and learning a little bit about Mumbai, perhaps De Graaf is right. Perhaps, if we want to have a real impact on our build environment, the first thing we should do is stop being architects.

Whenever I tell someone about the project I am working on, one of the first questions almost all of them ask, is whether or not it is getting build. I always find that a bit of a silly question, because of course it is not going to be build, but I can understand where it is coming from. “What meaning does architecture has, if it is not build?”, they must think. And perhaps in this case, they are right. This project will most likely not be build and is, unfortunately, at this moment in time not a feasible alternative for the development of the Chawls in Mumbai. It certainly is not going to change anything for the lives of the people it was designed for. Is there any merit in it at all? I think there is. This project can be seen as a (humble) protest against a market driven housing industry. I find it astonishing that we put the responsibility for such a vital commodity, housing, into the hands of people whose main (and often only) objective is to make as much money as possible. I hope that this project can raise some awareness about the current, often appalling, conditions people have to live in in not just Mumbai, but many fast-growing cities in the Global South. And please let us not make the mistake to think that what happens over there, is not going to have an impact on what happens over here. I truly believe that it is in these places, in cities like Mumbai, Lagos or Jakarta, where our future world is being shaped.

Graaf, R. d. (2017). *Four Walls and a Roof - The Complex Nature of a Simple Profession*. Cambridge: Harvard University Press.

Harris, A. (2012). The Metonymic Urbanism of Twenty-first-century Mumbai. *Urban Studies*, 49(13), 2955-2973.

UN-Habitat. (2003). *The Challenge of Slums*.